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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/652,987

08/29/2003

Joseph E. Harter JR.

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EXAMINER

ANYIKIRE, CHIKAODILI E

ART UNIT

PAPER NUMBER

2621

MAIL DATE

DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/652,987	<b>Applicant(s)</b> HARTER ET AL.	
	<b>Examiner</b> CHIKAODILI E. ANYIKIRE	<b>Art Unit</b> 2621	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 January 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. This Office Action is responsive to application number (10/652987) filed on May 12, 2004. Claims 1-7 are pending and have been examined.

### ***Response to Arguments***

2. After consideration, the Office has decided that the appellant's arguments with respect to "two mirrors mutually spaced on shaft" as persuasive. The case is being re-opened.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 1-7 rejected under 35 U.S.C. 103(a) as being unpatentable over Bradley (US 5,771,071) in view of Hayakawa (US 6,130,993) in further view of Vance et al (US 6,992,699).

As per **claim 1**, Bradley et al discloses an imaging system (Fig 2, 44), comprising:

an interlaced imaging device (Fig 2, 44; col 5 line 45) that produces video data from an aperture field (Fig 2, element 46; col 5 lines 45-46; the image plane presenting the aperture field) during a data acquisition interval in response to a data acquisition control signal (col 6 lines 13-15, col 7 lines 5-9, col 10 lines 52-56);

a mirrored shaft (Fig 5, 114; Col 9 Ln 53-67), and diversely angled with respect to the aperture field of said imaging device to define different predefined views of a scene (col 7 lines 3-14; Bradley discloses applying two different mirrors that are part of the mirrored shaft (Fig 2 element 114) that both have different function and different views of the scene based by their position along the shaft);

drive means including an electric motor (Fig 5, 118) for producing linear displacement of said mirrored shaft (Fig 5, 114) along said axis to change the view presented to said imaging device (Col 10 Ln 1-27) as the different diversely angled mirror elements are brought into alignment with the aperture field of said imaging device (col 7 lines 3-14; Bradley discloses different mirrors that correspond to image paths that are connected to the image plane (Fig 2 element 46)); and

control means for controlling said electric motor in response to a data acquisition control signal of the imaging device (Col 10 Ln 52-56) such that interlaced video data produced by said imaging device in a series of successive data acquisition intervals pertains to two or more different views (Col 12 Ln 1-16; the Bradley discloses two separate flashest for different fields, which relates to different views and these images are captured during different points of time depending on the control system).

However, Bradley et al does not explicitly teach a mirrored shaft that is axially displaceable for presenting different views to said imaging device.

In the same field of endeavor, Hayakawa teach a mirrored shaft (Fig 2, 26) that is axially displaceable for presenting different views to said imaging device (Col 8 Ln 50-55 and 62-67).

However, neither Bradley et al nor Hayakawa explicitly teaches the mirrored shaft including two or more mirror elements affixed to said shaft, said mirror elements being mutually spaced along the axis of said shaft.

In the same field of endeavor, Vance et al teaches the mirrored shaft including two or more mirror elements affixed to said shaft, said mirror elements being mutually spaced along the axis of said shaft (Fig 13 elements 56" and 62"; column 6 lines 10-23).

Therefore, it would have been obvious for one having skill in the art at the time of the invention to modify the invention of Bradley in view of Hayakawa in further of Vance et al. The advantage of Hayakawa is stabilizing images formed on a film surface when the image shakes due to unstable movement of the camera. The advantage of Vance

et al is the ability to selectively position the reflecting mirrors in the first and second optical paths.

As per **claim 2**, Bradley et al discloses the imaging system of claim 1, wherein said data acquisition control signal is a vertical synchronization control signal that coordinates readout of said video data (Col 11 Ln 42-58 and Col 12 Ln 12-16).

As per **claim 3**, Bradley et al discloses the imaging system of claim 2, wherein said mirrored shaft (Fig 2, 114) includes first and second linearly separated mirrors (Fig 2, 64, 86, and 110) that are alternately in position with respect to said imaging device during successive data acquisition periods of said imaging device (Col 9 Ln 53-67; the prior art describes two different mirrors that surrounds an axial).

As per **claim 4**, Bradley et al discloses the imaging system of claim 1, wherein said drive means includes a rotary cam mechanism driven by said electric motor (Fig 5, 118) and a connecting arm coupling said cam mechanism to said mirrored shaft (Fig 5, 114, Col 9 Ln 53-67).

As per **claim 5**, Bradley et al discloses the imaging system of claim 4, wherein said control means continuously drives said electric motor (Fig 5, 118) at a speed that is in synchronism with said data acquisition control signal (Col 10 Ln 52-67; the prior art discloses the actuation of the motor and also describes the synchronization of information which shows the control over the electric motor).

As per **claim 6**, Bradley discloses the imaging system of claim 1, where:

said mirror elements are horizontally angled with respect to said aperture field to define diverse horizontally angled views of said scene as the different diversely angled mirror elements are brought into alignment with the aperture field of said imaging device (col 6 lines 12-14 and col 7 lines 3-16).

As per **claim 7**, Bradley discloses the imaging system of claim 1, where:

said mirror elements are vertically angled with respect to said aperture field to define diverse vertically angled views of said scene as the different diversely angled mirror elements are brought into alignment with the aperture field of said imaging device (col 6 lines 12-14 and col 7 lines 3-16).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHIKAODILI E. ANYIKIRE whose telephone number is (571)270-1445. The examiner can normally be reached on Monday to Friday, 7:30 am to 5 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha D. Banks-Harold can be reached on (571) 272 - 7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2621

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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